ADAPTATION OF STREET FOOD ENTREPRENEURS DURING THE COVID-19 PANDEMIC IN NAKHON RATCHASIMA PROVINCE

Varaluk Matpootorn[A], Adisak Suvittawat[B]

ARTICLE INFO	ABSTRACT
	Purpose: The objectives of this study was to study the adaptation factors of street food entrepreneurs in the situation of the Covid-19 pandemic. **Theoretical framework:** The theoretical framework of research explains entrepreneurial adaptation and provides a conceptual foundation for understanding how entrepreneurs adapt to changing business environents. Which is related to the factors including: food innovation, entrepreneurial risk perception, and government measures. **Design/Methodology/Approach:** The research questionnaire was used as a tool to collect data from 400 samples of entrepreneurs who the street food entrepreneurs in Nakhon Ratchasima, Thailand. And use structural equation modeling (SEM) for data analysis and statistical analysis to examine complex relationships between variables and test theoretical models related to hypotheses. **Findings:** The results show that the effect of food innovation on entrepreneurial adaptation is partially explained by the influence of perceived risk. However, the government measures in Covid-19 pandemic play a role in mediating the relationship between food innovation and entrepreneurial adaptation. **Research, practical & social implications:** We recommended future studies could investigate how entrepreneurs can adapt their business models to ensure long-term sustainability and resilience in the face of future disruptions. **Originality/Value:** The findings of the research can potentially contribute to the development of strategies, policies, and support mechanisms to facilitate and enhance entrepreneurs' adaptation during times of crisis or uncertainty, such as the Covid-19 pandemic.

ADAPTAÇÃO DE EMPRESÁRIOS DE ALIMENTOS DE RUA DURANTE A PANDEMIA DA COVID-19 NA PROVÍNCIA DE NAKHON RATCHASIMA

RESUMO

Objetivo: O objetivo deste estudo foi estudar os fatores de adaptação dos empresários do setor da alimentação de rua na situação da pandemia de Covid-19.

Estrutura teórica: A estrutura teórica da pesquisa explica a adaptação empreendedora e fornece uma base conceitual para entender como os empreendedores se adaptam a ambientes de negócios em constante mudança. Que está relacionado com os fatores, incluindo: inovação alimentar, percepção de risco empresarial e medidas governamentais.

Design/Metodologia/Abordagem: O questionário de pesquisa foi usado como uma ferramenta para coletar dados de 400 amostras de empreendedores que compravam comida de rua em Nakhon Ratchasima, na Tailândia. E use

---

[A] *Master in Management. Department of School of Management Technology, Suranaree University of Technology. Thailand. E-mail: varalukmatputorn@gmail.com Orcid: https://orcid.org/0009-0000-0969-2806*
[B] *PhD in Management. Department of School of Management Technology, Suranaree University of Technology. Thailand. E-mail: adisak@sut.ac.th Orcid: https://orcid.org/0000-0001-5225-5804*

Intern. Journal of Profess. Bus. Review. |Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

1

a modelagem de equações estruturais (SEM) para análise de dados e análise estatística para examinar relações complexas entre variáveis e testar modelos teóricos relacionados a hipóteses.

Constatações: Os resultados mostram que o efeito da inovação alimentar na adaptação empresarial é parcialmente explicado pela influência do risco percebido. No entanto, as medidas governamentais na pandemia da Covid-19 desempenham um papel na mediação da relação entre inovação alimentar e adaptação empresarial.

Investigação, implicações práticas e sociais: recomendamos que estudos futuros possam investigar como os empresários podem adaptar os seus modelos de negócio para garantir a sustentabilidade e resiliência a longo prazo face a futuras perturbações.

Originalidade/Valor: os resultados da pesquisa podem potencialmente contribuir para o desenvolvimento de estratégias, políticas e mecanismos de apoio para facilitar e aprimorar a adaptação dos empreendedores em tempos de crise ou incerteza, como a pandemia da Covid-19.

Palavras-chave: Adaptação de Empreendedores de Alimentos de Rua, Inovação Alimentar, Percepção de Risco Empresarial, Medidas Governamentais na Pandemia da COVID-19.

ADAPTACIÓN DE EMPRESARIOS DE COMIDA CALLEJERA DURANTE LA PANDEMIA DE COVID-19 EN LA PROVINCIA DE NAJÓN RATCHASIMA

RESUMEN

Objetivo: El objetivo de este estudio fue estudiar los factores de adaptación de los empresarios de alimentos de calle en la situación de la pandemia de Covid-19.

Marco teórico: El marco teórico de la investigación explica la adaptación empresarial y proporciona una base conceptual para entender cómo los empresarios se adaptan a los cambiantes entornos empresariales. Lo cual se relaciona con los factores que incluyen: innovación alimentaria, percepción de riesgo empresarial, y medidas gubernamentales.

Diseño/Metodología/Enfoque: El cuestionario de investigación se utilizó como herramienta para recopilar datos de 400 muestras de empresarios que compraron alimentos callejeros en Nakhon Ratchasima, Tailandia. Y utilizar el modelado de ecuaciones estructurales (SEM) para el análisis de datos y análisis estadístico para examinar relaciones complejas entre variables y probar modelos teóricos relacionados con hipótesis.

Hallazgos: Los resultados muestran que el efecto de la innovación alimentaria en la adaptación emprendedora se explica parcialmente por la influencia del riesgo percibido. Sin embargo, las medidas gubernamentales en la pandemia de Covid-19 desempeñan un papel en la mediación de la relación entre la innovación alimentaria y la adaptación empresarial.

Investigación, implicaciones prácticas y sociales: Recomendamos estudios futuros que podrían investigar cómo los empresarios pueden adaptar sus modelos de negocio para garantizar la sostenibilidad y la resiliencia a largo plazo frente a futuras interrupciones.

Originalidad/Valor: Los resultados de la investigación pueden contribuir potencialmente al desarrollo de estrategias, políticas y mecanismos de apoyo para facilitar y mejorar la adaptación de los empresarios en tiempos de crisis o incertidumbre, como la pandemia de Covid-19.

Palabras clave: Adaptación de los Empresarios de Alimentos Callejeros, Innovación Alimentaria, Percepción del Riesgo Empresarial, Medidas Gubernamentales en la Pandemia de COVID-19.

INTRODUCTION

By the end of 2019, the COVID-19 pandemic had already begun, but its impact on the world was not yet fully realized. The pandemic gained significant momentum and had a tremendous impact on global health and the economy throughout 2020 and beyond. Indeed, the COVID-19 pandemic has had a profound impact on various sectors, including the industrial sector, wholesale and retail businesses, travel, and the restaurant industry. The economic consequences of the pandemic have led to the closure of numerous businesses and the loss of

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

2

livelihoods for many entrepreneurs. While the economy is expected to gradually recover in 2022, many entrepreneurs continue to face challenges in adapting to the changing business landscape.

According to the National Statistical Office (2020) the outbreak of COVID-19 had a severe impact on street food entrepreneurs accounting for the impact of government measures accounted for 59 percent, the impact of economic factors accounted for 28 percent, and the unaffected at 13 percent of the overall impact. In times of rapid change and uncertainty, it is crucial for entrepreneurs to adapt and find strategies to navigate challenging situations (D.O. McKee et al., 1989). By embracing adaptability, innovation, awareness of changes and risks, and technology, entrepreneurs can position themselves for success in a rapidly changing environment. It is important to remain agile and proactive in finding creative solutions to overcome challenges and to create a competitive advantage (Collins, C.J. &Smith, K.G.,2006).

Based on the above, this research will learn about adaptation of street food entrepreneurs in times of crisis and exploring the use of food innovation to improve business efficiency is a relevant and important research gap. Including awareness of risks and government measures as an intermediate variable in the study of street food entrepreneurs' adaptation during Covid-19 is a relevant approach. The results of this study can provide insights into the strategies, challenges, and successes of street food entrepreneurs in adapting to the pandemic. These lessons can be used as a reference for other street food entrepreneurs facing similar challenges in the future.

LITERATURE REVIEW

Entrepreneurial Adaptation

The entrepreneurial adaptation emphasizes the process through which entrepreneurs gather and process information from the external environment. By utilizing this information, entrepreneurs can develop adaptive strategies to ensure their survival and success. The factors involved in adaptation, as you mentioned, encompass various aspects of business operations, including production, marketing, distribution channels, and personnel (McKee et al.,1989). Entrepreneurs often need to generate innovative ideas and develop creative solutions to adapt to changing circumstances. This can improve business efficiency (Pradana, B. I., & Safitri, R.,2023). And managing risks associated with changing circumstances (Kulinich, T et al.,2023). Entrepreneurs must be proactive in assessing potential risks, developing contingency plans, and taking steps to mitigate or minimize the impact of risks on their business.

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

3

RESEARCH HYPOTHESES

Adaptation of Street Food Entrepreneurs in the Covid-19 Pandemic

The outbreak of the Covid-19 virus in late 2019 indeed had severe consequences for businesses across various sectors. The impact of the Covid-19 situation has indeed been challenging for many entrepreneurs. And has resulted in mass layoffs as businesses have had to reduce costs in order to sustain their operations during the economic downturn with decreased sales and revenue, many businesses have had to make difficult decisions to lay off employees as a measure to cut expenses (Zeb et al., 2021). Therefore, entrepreneurs need to demonstrate adaptability and flexibility in their business models to navigate through different situations, including the challenges posed by the Covid-19 pandemic (Castro & Zermeño, 2021).

Food Innovation

Food innovation plays a crucial role in the adaptation and success of street food entrepreneurs during times of crisis especially, in terms of increasing the ability to adapt for entrepreneurs and creating competitive advantages (Buchaiyaphum & Buranakul, 2022). In addition, Zacharias&Daldere (2022) realizing the potential of innovation and leveraging technology can significantly contribute to the success of entrepreneurs. Indeed, there is a correlation between food innovation and entrepreneurs' perceived risks. When entrepreneurs engage in food innovation, they often face uncertainties especially the Covid-19 pandemic (Chi, 2021) and potential risks associated with the introduction of new products, processes, or business models. The support from the government is crucial for the creation of food innovation among street food entrepreneurs. Government support can create a favorable regulatory environment that encourages and facilitates food innovation. Clear and supportive regulations can provide entrepreneurs with the necessary guidance and flexibility to experiment with new food concepts and business models (Damayra & Khatib, 2022). It was also found that government support, either directly or indirectly, also plays a key role in motivating industry innovation (Liu & Li, 2021). Based on the review of the literature of the above it leads to the following hypothesis:

H1: Food innovation has positive direct influence with adaptation of street food entrepreneurs in the Covid-19 pandemic.

H2: Food innovation has positive direct influence with entrepreneurial risk perception.

H3: Food innovation has positive direct influence with government measures in Covid-19 pandemic.

Entrepreneurial Risk Perception

Entrepreneurial risk perception involves recognizing potential risks and uncertainties that may impact the business. This awareness of risks allows entrepreneurs to identify areas that require adaptation in response to changing circumstances. Street food entrepreneurs need to make strategy improvements and focus on guidelines and safety measures to meet the changing consumer behavior and build trust among customers after the Covid-19 outbreak (Foroudi, Tabaghdehi, & Marvi, 2021). That entrepreneurs' perceptions can vary based on the government policies implemented to address crises (Xiong et al, 2022). Entrepreneurs who perceive government policies as supportive and effective in addressing the crisis are more likely to have a positive perception. Policies such as financial aid, tax incentives, and regulatory flexibility can help alleviate the burden on businesses and provide a sense of support (Janzen & Radulescu, 2022). Based on the review of the literature of the above it leads to the following hypothesis:

H4: Entrepreneurial risk perception has positive direct influence with adaptation of street food entrepreneurs in Covid-19 pandemic.

H5: Entrepreneurial risk perception has positive direct influence with government measures in Covid-19 pandemic.

Government Measures in Covid-19 Pandemic

In addition, Islam (2022) discovered that perceived risks can drive adaptation in businesses, and there is a positive correlation between adaptation and the performance of government officials in relation to state policy and government assistance. Indeed, the spread of the COVID-19 virus has necessitated government intervention to protect, and support affected individuals and businesses. Governments have implemented various policies, including public health measures, preventive measures, remedial measures, and economic measures, to mitigate the impact of the pandemic. These measures have had a direct impact on the public, including entrepreneurs, who have had to adapt to the new requirements and guidelines (Soongsumal & Paireepinas, 2021). This led to the hypothesis that:

H6: Government measures in Covid-19 pandemic has positive direct influence with adaptation of street food entrepreneurs in Covid-19 pandemic.

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

5

The Mediating Roles between Food Innovation and Adaptation of Street Food Entrepreneurs
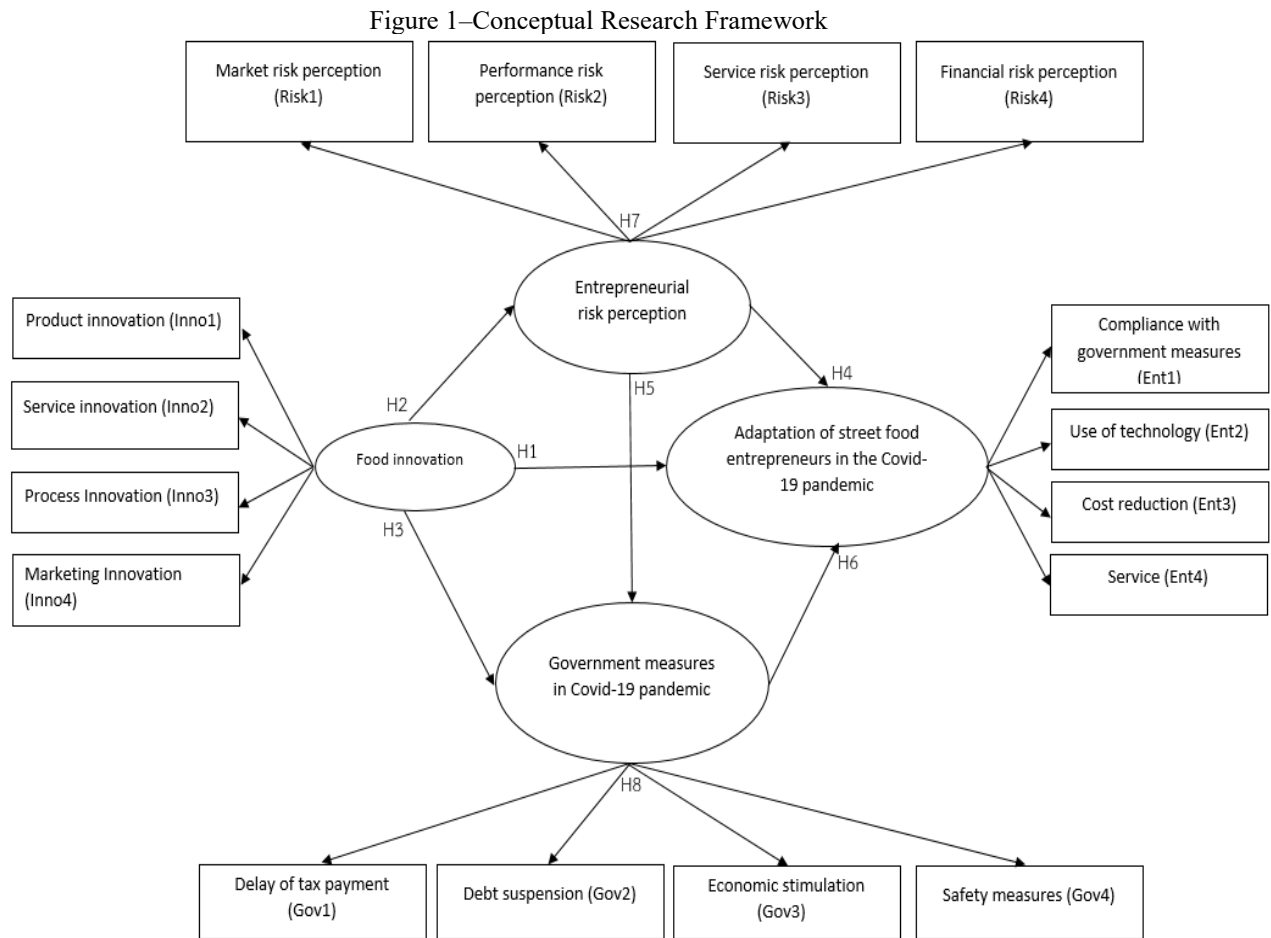
In this research will find the relationship between the variables is food innovation indirect influence on adaptation of street food entrepreneurs in Covid-19 pandemic through entrepreneurial risk perception. Enhancing innovation awareness requires emphasizing the perceived benefits and adaptability of innovations. By effectively communicating these aspects, providing education, training, and showcasing successful examples, entrepreneurs can be motivated to adopt and implement innovative solutions that can drive their businesses forward (Teklu et al,2022). However, this innovation can positively influence entrepreneurial risk perception by reducing perceived risks or increasing perceived opportunities. Entrepreneurs who perceive lower risks and higher opportunities are more likely to embrace adaptation and implement changes in response to the pandemic.

In addition, the relationship between the variables is food innovation indirect influence on adaptation of street food entrepreneurs in Covid-19 pandemic through with government measures in Covid-19 pandemic. The organizations need to adapt and change their strategies in various areas to navigate the challenges posed by the Covid-19 pandemic. Innovation is key to reducing the impact of the pandemic by finding innovative solutions, complying with regulations, and implementing technology-driven measures. By embracing innovation, organizations can position themselves for success in the face of adversity and uncertainty (Dehghani et al, 2022). The application of innovation, in conjunction with measures such as public health policies, transportation policies, and socio-economic development policies can help address the challenges posed the Covid-19 situation. That makes capacitates flexible adaptation in these unprecedented situations (Chakwizira, 2022). Moreover, Meng M, et al (2022) also pointed out the relationship of using innovation to plan and formulate government policies to solve various problems, leading to adaptation, which is an important key to drive business (Pu et al,2021).

Based on the relationships and insights discussed, the development of research concepts and hypotheses can be outlined as follows:

H7: Food innovation has an indirect influence on the adaptation of street food entrepreneurs in the Covid-19 pandemic through entrepreneurial risk perception.

H8: Food innovation has an indirect influence on the adaptation of street food entrepreneurs in the Covid-19 pandemic through government measures in Covid-19 pandemic.

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

6

Figure 1–Conceptual Research Framework

Source: Author (2023)

RESEARCH METHODOLOGY

In this research, a questionnaire will be utilized as a research tool to collect data from the target population, which consists of street food entrepreneurs in Nakhon Ratchasima Province.

The questionnaire will be designed to gather information related to the concepts and hypotheses outlined in the study. It may include questions about food innovation, entrepreneurial risk perception, government measures in Covid-19 pandemic, and adaptation of street food entrepreneurs in the Covid-19 pandemic. The researcher will use a Likert scale-based questionnaire to collect 400 questionnaires. The reliability of the questionnaire found that the overall Cronbach's alpha coefficient was 0.709 that means acceptable level of reliability for the questionnaire. Using a probabilistic sampling method by stratified random sampling provides a systematic way to select participants and increases generalizability. And use structural equation modeling (SEM) for data analysis and statistical analysis to examine complex relationships between variables and test theoretical models related to hypotheses.

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

7

RESULTS

Based on the analysis of the data from the street food entrepreneurs in Nakhon Ratchasima Province, it was found that the majority of respondents were female (52.00%). In terms of age distribution, the highest proportion was among respondents aged between 20 -30 years old, representing 48.75 percent of the sample. Most of them had an education level lower than a bachelor's degree, accounting for 55.25 percent. The common type of food was savory food (35.00%) and 41.75% of them were running business by food trucks. Most of the entrepreneurs had been in business for 1-5 years, representing 39.50 percent of the sample. The majority of operators reported having an average of 10-50 customers per day and they reported an average monthly income of about 5,000-10,000 baht by 51.00% and 52.25% respectively. That shown in Table 1

Table 1–Demography

Participants Street Food Entrepreneurs	Respondents Count	Respondents Percentage (%)
1. Gender		
1) Male	192	48.00
2) Female	208	52.00
Total	400	100.00
2. Age		
1) < 20 years	-	-
2) 20 – 30 years	195	48.75
3(31 – 40 years	178	44.50
4(> 40 years	27	6.75
Total	400	100.00
3. Education Level		
1) Lower than Bachelor Degree	221	55.25
2) Bachelor Degree	166	41.50
3) Higher than Bachelor Degree	13	3.25
Total	400	100.00
4. Types of food sold		
1) Savory food	140	35.00
2) Snacks or Appetizers	55	13.75
3) Dessert	112	28.00
4) Drinks	93	23.25
5) other	-	-
Total	400	100.00
5. Characteristics of business		
1) Set up a single sales table	73	18.25
2) Vending cart	107	26.75
3) Food Truck	167	41.75
4) Set up as a small shop	53	13.25
Total	400	100.00
6. Years in Business		
1) < 1 year	58	14.50
2(1 – 5 years	158	39.50
3(6 – 10 years	117	29.25
4) > 10 years	67	16.75
Total	400	100.00
7. Customer count (Daily)		

Participants Street Food Entrepreneurs	Respondents Count	Respondents Percentage (%)
1) < 10	-	-
2(10 – 50	204	51.00
3(51 – 100	196	49.00
4) > 100	-	-
Total	400	100.00
8. Income (Monthly)		
1) < 5,000 Baht	16	4.00
2) 5,000 – 10,000 Baht	209	52.25
3) 10,001 – 15,000 Baht	100	25.00
4) > 15,000 Baht	75	18.8
Total	400	100.00

Source: Prepared by the authors (2023)

Table 2 shows the data on entrepreneurs' adaptation factors in the Covid-19 pandemic. The data analysis by interpretation of opinion level according to Srisa-ard B. (2002) revealed that the participating entrepreneurs have opinions in food innovation in various aspects were as follows: product innovation were at the highest level with an average of 4.45, marketing innovation were at the highest level, with an average of 4.41, process innovation were at a high level, with an average of 4.20, and service innovation at high level, with an average of 3.95 respectively. However, the opinion on the factors related to the entrepreneurial risk perception shows that highest level with an average of 4.47 in performance risk perception, highest level with an average of 4.33 in financial risk perception, high level with an average of 4.11 in service risk perception, and high level with an average of 3.77 in market risk perception. In addition to the government measures in Covid-19 pandemic have opinions follows that delay of tax payment were at the highest level with an average of 4.25, safety measures were at the highest level with an average of 4.24, economic stimulation were at the high level with an average of 3.91, and debt suspension at the high level with an average of 3.79. The opinion level of adaptation of street food entrepreneurs in the Covid-19 pandemic can shows that highest level at 4.89, highest level at 4.23, high level at 3.94 and high level at 3.77 in the service, compliance with government measures, use of technology, and cost reduction respectively.

Table 2–The data analysis of opinions on the adaptation of street food entrepreneurs in the Covid-19 pandemic

Factors	Items	Average	Standard Deviation	Interpret
Food Innovation	Product innovation	4.45	0.582	Strongly Agree
	Marketing Innovation	4.41	0.577	Strongly Agree
	Process Innovation	4.20	0.644	Agree
	Service innovation	3.95	0.647	Agree
Entrepreneurial risk perception	Performance risk perception	4.47	0.560	Strongly Agree
		4.33	0.609	Strongly Agree
	Financial risk perception	4.11	0.612	Agree
	Service risk perception	3.77	0.731	Agree

	Market risk perception			
Government measures in Covid-19 pandemic	Delay of tax payment	4.25	0.637	Strongly Agree
	Safety measures	4.24	0.598	Strongly Agree
	Economic stimulation	3.91	0.725	Agree
	Debt suspension	3.79	0.737	Agree
Adaptation of street food entrepreneurs in the Covid-19 pandemic	Service	4.89	0.293	Strongly Agree
	Compliance with government measures	4.23	0.556	Strongly Agree
	Use of technology	3.94	0.636	Agree
	Cost reduction	3.77	0.872	Agree

Source: Prepared by the authors (2023)

Path Analysis and Research Hypothesis Testing

The result of the hypothesis analysis directly influences the adaptation of street food entrepreneurs in the Covid-19 pandemic can be represented in Figure 2.

Figure 2: Structural equation model analysis results
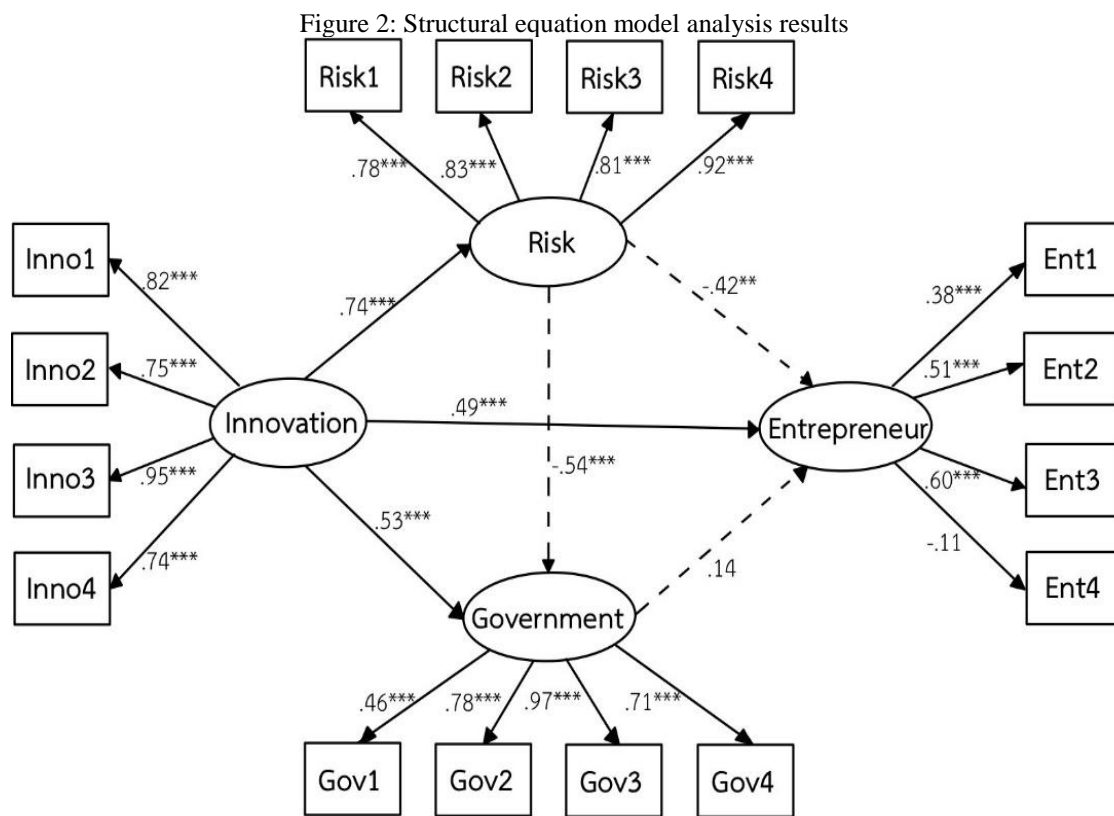
Chi-square = 251.356, Chi-square/df = 2.957, df = 85, p = .000, GFI = .930
CFI = .945, RMR = .038, RMSEA = .070, NFI = .926
Source: Author (2023)

According to test the overall consistency of the structural equation model, several statistical measures are "Chi-square test" (X^2>0.05) (Kelloway,2015), "Root mean square error of approximation" (RMSEA< 0.08) (Hu &Bentler,1999), "Goodness of fit index" (GFI>0.90), "Normed fit index" (NFI>0.90), and "Comparative fit index" (CFI>0.90) (Hair et al.,2010). The test results could pass the specified criteria means that the model adequately explains the

observed data and provides a good fit to the data. It implies that the variables included in the model are meaningful in explaining the phenomenon under investigation.

The path analysis results that shown in Table 3. The standardized estimates of the path coefficients are typically interpreted in relation to their significance levels and the specified hypothesis. Then the hypothesis results are food innovation has a direct and positive influence on the adaptation of street food entrepreneurs during the Covid-19 pandemic (H1: β=0.494, p<0.001). Food innovation has a direct and positive influence on the entrepreneurial risk perception (H2: β=0.736, p<0.001). Food innovation has a direct and positive influence on the government measures in Covid-19 pandemic (H3: β=0.531, p<0.001). Entrepreneurial risk perception has a direct and negative influence on the adaptation of street food entrepreneurs in the Covid-19 pandemic (H4: β= -0.424, p<0.01) it would mean that the hypothesis is rejected. Entrepreneurial risk perception has a direct and negative influence on the government measures in Covid-19 pandemic (H5: β=-0.537, p<0.001) it would mean that the hypothesis is rejected. And the government measures in Covid-19 pandemic have no positive direct influence on the adaptation of street food entrepreneurs in the Covid-19 pandemic at the statistical significance level of 0.001 and would mean that the hypothesis is rejected.

Table 3: Hypothesis testing

Hypothesis	Paths	Path Coefficient	P-value	Relationship
H_1	Innovation → Entrepreneur	.494***	0.001	Supported
H_2	Innovation → Risk	.736***	0.001	Supported
H_3	Innovation → Government	.531***	0.001	Supported
H_4	Risk → Entrepreneur	-.424**	0.01	Unsupported
H_5	Risk → Government	-.537***	0.001	Unsupported
H_6	Government → Entrepreneur	.139	-	Unsupported

Note: *p<0.05; **p<0.01; ***p<0.001
Source: Prepared by the authors (2023)

In Table 4, could be show the results of testing the indirect effect hypothesis. The entrepreneurial risk perception has an indirect effect coefficient of -0.381. As a result, the coefficient of direct influence between the food innovation and the adaptation of street food entrepreneurs in the Covid-19 pandemic increased from original value are 0.204 and 0.615 at the level of statistical significance 0.001 respectively. This means that the effect of food innovation on entrepreneurial adaptation is partially explained by the influence of perceived risk. The government measures in Covid-19 pandemic have indirect effect coefficient of 0.022. Therefore, the coefficient of direct influence between food innovation factors and the factor of adaptation of entrepreneurs decreased from original value are 0.204 at the level of statistical

significance 0.001 and 0.123 at the level of statistical significance 0.01. Could means that the government measures in Covid-19 pandemic play a role in mediating the relationship between food innovation and entrepreneurial adaptation, indicating that the effect of food innovation on adaptation is influenced by the presence of government measures in the Covid-19 pandemic situation.

Table 4: Mediation analysis

Hypothesis	Paths	Direct effect	Indirect effect	Mediation	Relationship
	Innovation→ Entrepreneur	0.204***			Supported
H7	Innovation→Risk →Entrepreneur		-0.381***	partial	Supported
H8	Innovation→Government → Entrepreneur		0.022***	partial	Supported

Note: *p<0.05; **p<0.01; ***p<0.001
Source: Prepared by the authors (2023)

DISCUSSION

Indeed, the results of the study indicate that food innovation has a direct and positive influence on the adaptation of street food entrepreneurs during the Covid-19 pandemic (H1). This implies that incorporating innovative practices and strategies related to food can significantly contribute to the ability of street food operators to adapt to the challenges and changes brought about by the pandemic (Pimkaew, 2022). However, food innovation also influences entrepreneurial risk perceptions because they may feel anxious or uncomfortable about embracing these changes, especially if they lack familiarity or experience with the technologies involved (Krimja C. et al., 2023). Therefore, the H2 is supported. And the food innovation can contribute to shaping and influencing the response of government measures by aligning with the objectives of public health and safety, supporting economic recovery, and serving as a model for innovative practices (Ieamvijarn, 2023) that was supported H3.

Moreover, we found that hypothesis unsupported. The entrepreneurial risk perception can indeed have a negative influence on their adaptation during the Covid-19 pandemic (H4). Perceived risk refers to the subjective assessment and evaluation of potential threats and uncertainties that entrepreneurs perceive in their business environment to be able to flexible adaptation (Tai et al,2020). And entrepreneurial risk perception may have negative influence on the government measures (H5). Entrepreneurs have concerns or reservations about the effectiveness, feasibility, or impact of government measures on their businesses. They may perceive certain measures as burdensome, restrictive, or not aligned with their specific needs or circumstances. These perceptions can stem from various factors, such as limited information,

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

12

conflicting views, or past experiences with government interventions (Kamnerdsap & Vichiensan, 2023). The results in H6 indicate that government measures in the Covid-19 pandemic have no influence on the adaptation of street food entrepreneur, it suggests that the implemented government measures may not directly impact or significantly contribute to the adaptation efforts of them. It could be due to a lack of alignment between the specific government measures and the needs or challenges faced by entrepreneurs. The measures implemented may not sufficiently address the unique circumstances, constraints, or operational requirements of these businesses.

While food innovation as mentioned earlier, can introduce new strategies, products, services, or marketing approaches that may help street food entrepreneurs adapt to the challenges posed by the Covid-19 pandemic. However, the impact of food innovation on adaptation is not direct but mediated by entrepreneurial risk perception associated with the pandemic (H7), such as health risks, financial risks, regulatory risks, or market risks, play a role in shaping their adaptation strategies. The level of risk perception may vary among entrepreneurs, and those who perceive higher risks may be more motivated to adopt innovative practices to address the challenges and uncertainties brought by the pandemic (Khasasin R.et al,2023). Furthermore, the partial influence of government measures as an intermediate variable (H8) suggests that while food innovation can directly influence entrepreneurial adaptation, the effect may be further enhanced or moderated by the presence of supportive government measures. For example, food innovation strategies implemented by street food entrepreneurs, such as introducing online ordering systems or adopting contactless payment methods, may be more effective and successful when complemented by government policies that promote digital infrastructure, provide financial aid, or facilitate regulatory flexibility during the pandemic (Meng M, et al,2022).

LIMITATIONS AND FUTURE RESEARCH

This research studies the factors affecting the adaptation of entrepreneurs during the COVID-19 pandemic. The research might not have extensively examined the sustainability and resilience of street food businesses in the post-pandemic period. Future studies could investigate how entrepreneurs can adapt their business models to ensure long-term sustainability and resilience in the face of future disruptions.

CONCLUSION

Based on the results, it appears that food innovation has a direct influence on entrepreneurs' adaptation in the Covid-19 pandemic. This means that implementing innovative practices related to food, such as new menu offerings, delivery services, or safety protocols, can positively impact the ability of entrepreneurs to adapt their business operations and strategies during the pandemic. When entrepreneurs embrace food innovation, it can potentially lead to a lower perception of risks associated with operating their businesses during the Covid-19 pandemic. Additionally, it may indirectly influence the government's response and measures taken to support entrepreneurs in navigating the challenges posed by the pandemic. These findings highlight the importance of food innovation as a strategy for entrepreneurs to adapt and thrive in the face of disruptive events like the Covid-19 pandemic. By implementing innovative approaches, entrepreneurs can not only enhance their adaptation capabilities but also influence their perception of risks and the support they receive from the government.

It is important to note that the specific mechanisms through which food innovation influences risk perception and government measures may vary and require further investigation. However, the overall findings suggest that promoting food innovation can be beneficial for entrepreneurs in navigating the challenges posed by the COVID-19 situation.

REFERENCES

Buchaiyaphum, T., & Buranakul, S. (2022). AN INNOVATION SUPPLY CHAIN MANAGEMENT MODEL TO ENHANCE THE ADAPTABILITY OF LARGE LOGISTICS SERVICE PROVIDERS IN THAILAND. *Journal of Social Science and Buddhistic Anthropology*, 7(1), 295–312. Retrieved from https://so04.tci-thaijo.org/index.php/JSBA/article/view/255637

Castro, M. P., & Zermeño, M. G. (2021). Being an entrepreneur post-COVID-19 – resilience in times of crisis: a systematic literature review. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 721-746. https://doi.org/10.1108/JEEE-07-2020-0246

Chakwizira, J. (2022). Stretching resilience and adaptive transport systems capacity in South Africa: Imperfect or perfect attempts at closing COVID -19 policy and planning emergent gaps. *Transport Policy*, 125, 127-150. https://doi.org/10.1016/j.tranpol.2022.06.003

Chi, N. T. (2021). Innovation capability: The impact of e-CRM and COVID-19 risk perception. *Technology in Society*, 67. https://doi.org/10.1016/j.techsoc.2021.101725

Collins, C. a. (2006). Knowledge Exchange and Combination: The Role of Human Resource Practices in the Performance of High Technology Firms. *Academy of Management Journal*, 49, 544-560. https://doi.org/10.5465/AMJ.2006.21794671

D. O. McKee, P. R. (1989). Strategic Adaptability and Firm Performance: A Market- Contingent Perspective. *Journal of Marketing*, 53(3), 21-35. doi:10.2307/1251340

Damayra, F., & Khatib, T. (2022). Assessment of innovation policy standards' impact on local development of renewable energy in Palestinian local government units. *Renewable Energy*, 187, 177-192. https://doi.org/10.1016/j.renene.2022.01.065

Dehghani, M., Kennedy, R. W., Mashatan, A., Rese, A., & Karavidas, D. (2022). High interest, low adoption. A mixed-method investigation into the factors influencing organisational adoption of blockchain technology. *Journal of Business Research*, 149, 393-411. https://doi.org/10.1016/j.jbusres.2022.05.015

Foroudi, P., Tabaghdehi, S., & Marvi, R. (2021). The gloom of the COVID-19 shock in the hospitality industry: A study of consumer risk perception and adaptive belief in the dark cloud of a pandemic. *International Journal of Hospitality Management*, 92. https://doi.org/10.1016/j.ijhm.2020.102717

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis Seventh Edition*. New Jersey: Prentice Hall.

Hu, L.-t., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. https://doi.org/10.1080/10705519909540118

Ieamvijarn, S. (2023). Policy Innovation and Economic Driving in Maha Sarakham Province. *Journal of Research and Development Institute, Rajabhat Maha Sarakham University*, 10(3).

Islam, T. A. (2022). A business approach to climate adaptation in local communities. *Journal of Environmental Management*, 312. https://doi.org/10.1016/j.jenvman.2022.114938

Janzen, B., & Radulescu, D. (2022). Effects of COVID-19 related government response stringency and support policies: Evidence from European firms. *Economic Analysis and Policy*, 129-145. doi: 10.1016/j.eap.2022.07.013

Kamnerdsap, S., & Vichiensan, V. (2023). Perception of passengers on COVID-19 countermeasures: case study of blue and purple. *Journal of Engineering and Innovation*, 16(1).

Kelloway, E. (2015). *Using Mplus for Structural Equation Modeling*. Thousand Oaks: CA: Sage.

Khasasin, R., Prachuamoh, A., Khasasin, K., & Pojsupap, T. (2022). Factors Affecting Public Service Services of Local Administrative Organizations in Rayong Province on the Situation of the Epidemic of Coronavirus Disease (COVID-19). *Romphruek Journal*, 41(1), 271-240.

Krimja, C., Sreyantha, S., Srisopachit, P., Chandhrarome, N., & Nawapornkongprecha, K. (2023). Perception of Risks Online Financial Banking Innovations Users that Affect the Trust of Commercial Bank in Thailand. *Journal of Educational Management and Research Innovation*, 270-277.

Kulinich, T., Andrushko, R., Prosovych, O., Sternyuk, O., & Tymchyna, Y. (2023). Enterprise Risk Management in an Uncertain Environment. *International Journal of Professional Business Review*, 8(4), e01700. https://doi.org/10.26668/businessreview/2023.v8i4.1700

Liu, C., & Li, L. (2021). Place-based techno-industrial policy and innovation: Government responses to the information revolution in China. *China Economic Review*, 66. https://doi.org/10.1016/j.chieco.2021.101600

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

15

Mekanukroh, P. (2012). *Using the five senses to enhance experiences with food*. Bangkok: The Ministry of Culture.

Meng, M., Dabrowski, M., Xiong, L., & Stead, D. (2022). Spatial planning in the face of flood risk: Between inertia and transition. *Cities*, 126. https://doi.org/10.1016/j.cities.2022.103702

Pimkaew, S. (2022). FACTORS AFFECTING ON ADAPTION TO BUSINESS OPERATIONS OF ENTREPRENEURS SMES DURING CORONAVIRUS DISEASE 2019 (COVID-19) IN BANGKOK AND PERIMETER.

Pradana, B. I., & Safitri, R. (2023). Business Orientation and Innovation Capability in Improving Operational Performance. *International Journal of Professional Business Review*, 8(5), e01136. https://doi.org/10.26668/businessreview/2023.v8i5.1136

Pu, G., Mehta, A., Naqvi, F. N., & Karim, S. (2021). Innovative Finance, Technological Adaptation and SMEs Sustainability: The Mediating Role of Government Support during COVID-19 Pandemic. *Sustainability*. https://doi.org/10.3390/su13169218

Soongsumal, W., & Paireepinas, P. (2021). Adjustment of the Informal Employment Under the Social Crisis a Case Study a Group of Taxi Drivers in Selaphum District, Roi Et Province. *Journal of Modern Learning Development*, 6(6).

Srisa-ard, B. (2002). *Basic Research*. Bangkok: Suweeriyasan.

Tai, X., Lu, L., Jiang, Q., & Chang, D. (2020). The perception of desertification, its social impact and the adaptive strategies of ecological migrants in the desertification area, China. *Chinese Journal of Population, Resources and Environment*, 18(4), 324-330. https://doi.org/10.1016/j.cjpre.2020.05.001

Teklu, M. A. (2022). Effects of perceptions on adoption of climate-smart agriculture innovations: empirical evidence from the upper Blue Nile Highlands of Ethiopia. *International Journal of Climate Change Strategies and Management*, 14(3), 293-311. https://doi.org/10.1108/IJCCSM-04-2021-0035

Xiong, Y. (2022). Perceptions and knowledge regarding the COVID-19 pandemic between U.S. and China: a mixed methods study. *Globalization and Health*. doi: 10.1186/s12992-022-00864-y

ZACHARIAS, N., & DALDERE, D. (2022). RESOURCE ACQUISITION AND OPPORTUNISTIC BEHAVIOUR IN OPEN INNOVATION RELATIONSHIPS: THE CONTINGENCY EFFECTS OF AN OPEN ORGANISATIONAL CONTEXT. *International Journal of Innovation Management*, 26(1). doi:10.1142/S1363919622500062

Zeb, S., Hussain, S. S., & Javed, A. (2021). COVID-19 and a way forward for restaurants and street food vendors. *Cogent Business & Management*. https://doi.org/10.1080/23311975.2021.1923359

Intern. Journal of Profess. Bus. Review. | Miami, v. 8 | n. 7 | p. 01-16 | e02423 | 2023.

16